

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Instructions for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/626,472
Filing Date	July 24, 2003
First Named Inventor	LIBERA, Matthew
Art Unit	1762
Examiner Name	To Be Assigned
Attorney Docket Number	97084-00022

Sheet 1 of 9

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	1	US- 3,470,078	09-30-1969	P. A. King	
	2	US- 4,684,558	08-04-1987	Keusch et al.	
	3	US- 4,997,656	03-05-1991	Shikinami et al.	
	4	US- 5,143,071	09-01-1992	Keusch et al.	
	5	US- 5,171,264	12-15-1992	Merrill	
	6	US- 5,219,325	06-15-1993	Hennink et al.	
	7	US- 5,275,838	01-04-1994	Merrill	
	8	US- 5,354,790	10-11-1994	Keusch et al.	
	9	US- 5,480,717	01-02-1996	Kundel	
	10	US- 5,505,957	04-09-1996	D'Angelo et al.	
	11	US- 5,567,435	10-22-1996	Hubbell et al.	
	12	US- 5,593,395	01-14-1997	Martz	
	13	US- 5,626,863	05-06-1997	Hubbell et al.	
	14	US- 5,650,165	07-22-1997	Akemi et al.	
	15	US- 5,674,275	10-07-1997	Tang et al.	
	16	US- 5,674,346	10-07-1997	Kundel	
	17	US- 5,700,585	12-23-1997	Lee	
	18	US- 5,712,346	01-27-1998	Lee	
	19	US- 5,807,636	09-15-1998	Sheu et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁴
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	47	EP 1 116 516	07-18-2001	Gesellschaft		
	48	WO 96/030409	10-03-1996	Makromolekularn		
	49	WO 02/017888	03-07-2002	Gesellschaft		

Examiner Signature		Date Considered	7/23/00
-----------------------	--	--------------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/626,472
Filing Date	July 24, 2003
First Named Inventor	LIBERA, Matthew
Art Unit	1762
Examiner Name	To Be Assigned
Attorney Docket Number	97084-00022

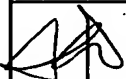

Sheet

4

of

9

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	50	ITO, Yoshihiro, Surface Micropatterning to Regulate Cell Functions, Biomaterials, 1999, pp. 2333-2342, Issue 20.	
	51	KANE, Ravi S. et al., Patterning Proteins and Cells Using Soft Lithography, Biomaterials, 1999, pp. 2363-2376, Issue 20.	
	52	CHEN, Christopher S. et al., Geometric Control of Cell Life and Death, Science, 30 May 1997, pp. 1425-1428, Issue 276.	
	53	HYUN, Jinho et al., Micropatterns of a Cell-Adhesive Peptide on an Amphiphilic Comb Polymer Film, Langmuir, 2002, pp. 2975-2979, Issue 18.	
	54	JAMES, C. D. et al., Patterned Protein Layers on Solid Substrates by Thin Stamp Microcontact Printing, Langmuir, 1998, pp. 741-744, Issue 14.	
	55	SINGHVI, Rahul et al., Engineering Cell Shape and Function, Science, 29 April 1994, pp. 696-698, Issue 264.	
	56	CHIU, Daniel T. et al., Patterned Deposition of Cells and Proteins onto Surfaces by Using Three-Dimensional Microfluidic Systems, Proceedings of the National Academy of Sciences USA, 14 March 2000, pp. 2408-2413, Vol. 97, No. 6.	
	57	DELAMARCHE, Emmanuel et al., Microfluidic Networks for Chemical Patterning of Substrates: Design and Application to Bioassays, Journal of the American Chemical Society, 9 January 1998, pp. 500-508, Issue 120.	

Examiner Signature		Date Considered	7/26/06
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/626,472
Filing Date	July 24, 2003
First Named Inventor	LIBERA, Matthew
Art Unit	1762
Examiner Name	To Be Assigned
Attorney Docket Number	97084-00022

Sheet

5

of

9

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	58	FOLCH, Albert et al., Cellular Micropatterns on Biocompatible Materials, Biotechnology Progress, 20 May 1998, pp. 388-392, Issue 14.	
	59	PARK, Ann et al., Integration of Surface Modification and 3D Fabrication Techniques to Prepare Patterned Poly(L-lactide) Substrates Allowing Regionally Selective Cell	
		Adhesion, Journal of Biomaterials Science: Polymer Edition, 1998, pp. 89-110, Vol. 9, No. 2.	
	60	LEE, Ki-Bum et al., Protein Nanoarrays Generated by Dip-Pen Nanolithography, Science, 1 March 2002, pp. 1702-1705, Vol. 295.	
	61	NGUYEN, Kytai Truong et al., Photopolymerizable Hydrogels for Tissue Engineering Applications, Biomaterials, 2002, pp. 4307-4314, Issue 23.	
	62	PEPPAS, Nicholas A. et al., New Challenges in Biomaterials, Science, 25 March 1994, pp. 1715-1720, Vol. 263.	
	63	BEEBE, David J. et al., Functional Hydrogel Structures for Autonomous Flow Control Inside Microfluidic Channels, Nature, 6 April 2000, pp. 588-590, Vol. 404.	
	64	HARRIS, J. Milton, Introduction to Biotechnical and Biomedical Applications of Poly(Ethylene Glycol), Poly(Ethylene Glycol) Chemistry, 1992, pp. 1-14, Plenum Press, New York City, United States of America.	
	65	ISRAELACHVILI, Jacob, The Different Faces of Poly(Ethylene Glycol), Proceedings of the National Academy of Sciences USA, August 1997, pp. 8378-8379, Vol. 94.	

Examiner Signature		Date Considered	7/23/06
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**



(Use as many sheets as necessary)

Complete If Known

Sheet 6 of 9

Application Number	10/626,472
Filing Date	July 24, 2003
First Named Inventor	LIBERA, Matthew
Art Unit	1762
Examiner Name	To Be Assigned
Attorney Docket Number	97084-00022

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	66	ALCANTAR, Norma A. et al., Polyethylene Glycol-Coated Biocompatible Surfaces, Journal of Biomedical Materials Research, 2000, pp. 343-351, Vol. 51.	
	67	ANDRADE, J. D. et al., Protein Adsorption and Materials Biocompatibility: A Tutorial Review and Suggested Hypothesis, Advances in Polymer Science 79, 1986, pp. 1-63, Springer-Verlag, Berlin.	
	68	GOMBOTZ, Wayne R. et al., Protein Adsorption to Poly(Ethylene Oxide) Surfaces, Journal of Biomedical Materials Research, 1991, pp. 1547-1562, Vol. 25.	
	69	GRAHAM, N. B., Poly(Ethylene Glycol) Gels and Drug Delivery, Poly(Ethylene Glycol) Chemistry, 1992, pp. 263-281, Plenum Press, New York City, United States of America.	
	70	PRIME, Kevin L. et al., Adsorption of Proteins onto Surfaces Containing End-Attached Oligo(Ethylene Oxide): A Model System Using Self-Assembled Monolayers, Journal of the American Chemical Society, 1993, pp. 10714-10721, Issue 115.	
	71	SOFIA, Susan J. et al., Poly(Ethylene Oxide) Grafted to Silicon Surfaces: Grafting Density and Protein Adsorption, Macromolecules, 10 July 1998, pp. 5059-5070, Issue 31.	
	72	FOTIOS, M. Andreopoulos et al., Light-Induced Tailoring of PEG-Hydrogel Properties, Biomaterials, 1998, pp. 1343-1352, Issue 19.	

Examiner Signature



Date Considered

1/28/06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**



(Use as many sheets as necessary)

Complete if Known

Application Number	10/626,472
Filing Date	July 24, 2003
First Named Inventor	LIBERA, Matthew
Art Unit	1762
Examiner Name	To Be Assigned
Attorney Docket Number	97084-00022

Sheet 7 of 9

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	73	CRUISE, Gregory M. et al., Characterization of Permeability and Network-Structure of Interfacially Photopolymerized Poly(Ethylene glycol) Diacrylate Hydrogels, Biomaterials, 1998, pp. 1287-1294, Issue 19.	
	74	LU, Sanxiu et al., Release Behavior of High Molecular Weight Solutes from Poly(Ethylene Glycol)-Based Degradable Networks, Macromolecules, 15 March 2000, pp. 2509-2515, Issue 33.	
	75	MELLOTT, Michael B. et al., Release of Protein from Highly Cross-Linked Hydrogels of Poly(Ethylene Glycol) Diacrylate Fabricated by UV Polymerization, Biomaterials, 2001, pp. 929-941, Issue 22.	
	76	KOFINAS, Peter et al., Hydrogels Prepared by Electron Irradiation of Poly(Ethylene Oxide) in Water Solution: Unexpected Dependence of Cross-Link Density and Protein Diffusion Coefficients on Initial PEO Molecular Weight, Biomaterials, 1996, pp. 1547-1550, Issue 17.	
	77	ROSIK, J. M. et al., Synthesis of Hydrogels by Irradiation of Polymers in Aqueous Solution, Radiation Physics and Chemistry, 1999, pp. 139-151, Issue 55.	
	78	SOFIA, Susan J. et al., Grafting of PEO to Polymer Surfaces Using Electron Beam Irradiation, Journal of Biomedical Materials Research, 1998, pp. 153-163, Issue 40.	

Examiner Signature		Date Considered	1/23/06
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**



(Use as many sheets as necessary)

Complete if Known

Application Number	10/626,472
Filing Date	July 24, 2003
First Named Inventor	LIBERA, Matthew
Art Unit	1762
Examiner Name	To Be Assigned
Attorney Docket Number	97084-00022

Sheet 8 of 9

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	79	FLORY, Paul J., Principles of Polymer Chemistry, 1953, pp. 576-594, Cornell University Press, Ithaca, New York, United States of America.	
	80	MERRILL, Edward W. et al., Partitioning and Diffusion of Solutes in Hydrogels of Poly(Ethylene Oxide), Biomaterials, 1993, pp. 1117-1126, Vol. 14, No. 15.	
	81	ZHANG, Lihua et al., Radiation Effects on Crystalline Polymers – I. Gamma-Radiation-Induced Crosslinking and Structural Characterization of Polyethylene Oxide, Radiation Physics and Chemistry, 1992, pp. 501-505, Vol. 40, No. 6.	
	82	MURATA, Kenji et al., Monte Carlo Simulation of Fast Secondary Electron Production in Electron Beam Resists, Journal of Applied Physics, July 1981, pp. 4396-4405, Vol. 52, No. 7.	
	83	RAI-CHOUDHURY, P., Electron Beam Lithography, Handbook of Microlithography, Micromachining, and Microfabrication: Volume 1: Microlithography, 1997, pp. 160-237, SPIE Optical Engineering Press, Bellingham, Washington, United States of America.	
	84	KURTZ, Steven M. et al., Advances in the Processing, Sterilization, and Crosslinking of Ultra-High Molecular Weight Polyethylene for Total Joint Arthroplasty, Biomaterials, 1999, pp. 1659-1688, Issue 20.	

Examiner Signature		Date Considered	1/23/06
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**


(Use as many sheets as necessary)

Complete if Known

Application Number	10/626,472
Filing Date	July 24, 2003
First Named Inventor	LIBERA, Matthew
Art Unit	1762
Examiner Name	To Be Assigned
Attorney Docket Number	97084-00022

Sheet 9 of 9

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	85	DITCHFIELD, R. W. et al., "Electron Energy Loss Studies of Polymers During Radiation Damage, Philosophical Magazine, 1973, pp. 1267-1280, Vol. 27, No. 6.	
	86	MERRILL, Edward W. et al., Polyethylene Oxide As a Biomaterial, Journal of the American Society for Artificial Internal Organs, 1982, pp. 60-64, Issue 6.	
	87	GOODBERLET, James G. et al., Performance of the Raith 150 Electron-Beam Lithography System, Journal of Vacuum Science and Technology, November/December 2001, pp. 2499-2503, Vol. B19, No. 6.	
	88	INGBER, Donald E., Fibronectin Controls Capillary Endothelial Cell Growth by Modulating Cell Shape, Proceedings of the National Academy of Science, May 1990, pp. 3579-3583, Vol. 87.	

Examiner Signature		Date Considered	1/26/06
--------------------	---	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	10/626,472
Filing Date	July 24, 2003
First Named Inventor	Matthew R. Libera
Art Unit	To be assigned
Examiner Name	To be assigned
Attorney Docket Number	97084/00022

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code (if known) ²			
[Signature]		US- 4,684,558		8/4/1987	Keusch, et al.	
		US- 4,997,656		3/5/1991	Shikinami, et al.	
		US- 5,143,071		9/1/1992	Keusch, et al.	
		US- 5,171,264		12/15/1992	Merrill	
		US- 5,219,325		6/15/1993	Hennink, et al.	
		US- 5,275,838		1/4/1994	Merrill	
		US- 5,354,790		10/11/1994	Keusch, et al.	
		US- 5,480,717		1/2/1996	Kundel	
		US- 5,505,957		4/4/1996	D'Angelo, et al.	
		US- 5,567,435		10/22/1996	Hubbell, et al.	
		US- 5,593,395		1/14/1997	Martz	
		US- 5,626,863		5/6/1997	Hubbell, et al.	
		US- 5,650,165		7/22/1997	Akemi, et al.	
		US- 5,674,275		10/7/1997	Tang, et al.	
		US- 5,674,346		10/7/1997	Kundel	
		US- 5,700,585		12/23/1997	Lec	
		US- 5,712,346		1/27/1998	Lec	
		US- 5,807,636		9/15/1998	Sheu, et al.	
[Signature]		US- 5,837,377		11/17/1998	Sheu, et al.	
		US- 5,840,329		11/24/1998	Bai	

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

Date Considered

1/23/06

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

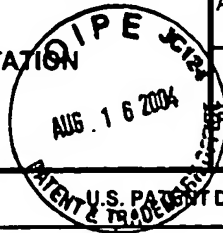
This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

ATTY DOCKET NO.
97084/00022

SERIAL NO.
10/626,472



FILING
July 24, 2003

GROUP
To be assigned

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5,846,214	12/8/1998	Makuuchi, et al.			
	6,068,053	5/30/2000	Shaw			
	6,103,785	8/15/2000	Kajikawa, et al.			
	6,187,872 B1	2/13/2001	Yanase, et al.			
	6,228,390 B1	5/8/2001	Kundel			
	6,306,922 B1	10/23/2001	Hubbell, et al.			
	6,316,018 B1	11/13/2001	Ding, et al.			
	6,444,744 B1	9/3/2002	Fujimaru, et al.			
	6,468,383 B2	10/22/2002	Kundel			
	6,475,808 B1	11/5/2002	Wagner, et al.			
	6,475,809 B1	11/5/2002	Wagner, et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

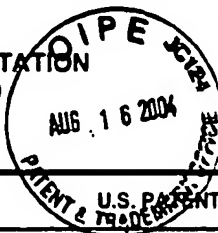
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)



ATTY DOCKET NO.
97084/00022

SERIAL NO.
10/626,472

FILING
July 24, 2003

GROUP
To be assigned

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,509,098 B1	1/21/2003	Merrill, et al.			
	US 2001/0041349 A1	11/15/2001	Patron, et al.			
	US 2002/0007217 A1	1/17/2002	Jacob, et al.			
	US 2002/0010261 A1	1/24/2002	Callahan, et al.			
	US 2002/0037383 A1	3/28/2002	Spillman, Jr., et al.			
	US 2002/0071902 A1	6/13/2002	Ding, et al.			
	US 2002/0091229 A1	7/11/2002	Hubbell, et al.			
	US 2002/0106702 A1	8/8/2002	Wagner, et al.			
	US 2002/0110932 A1	8/15/2002	Wagner, et al.			
	US 2002/0110933 A1	8/15/2002	Wagner, et al.			
	US 2002/0119579 A1	8/29/2002	Wagner			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<div data-bbox="89 1806 201 1831" data-label="Text"> <p>EXAMINER</p> </div>	<div data-bbox="803 1801 1006 1829" data-label="Text"> <p>DATE CONSIDERED</p> </div> <p>7/23/03</p>
---	---

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

ATTY DOCKET NO.
97084/00022

SERIAL NO.
10/626,472



FILING
July 24, 2003

GROUP
To be assigned

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	US 2002/0132272 A1	9/19/2002	Wagner, et al.			
	US 2003/0031699 A1	2/13/2003	Van Antwerp			
	US 2003/0054024 A1	3/20/2003	Munro, et al.			
	US 2003/0069383 A1	4/10/2003	Van Antwerp, et al.			
	US 2003/0077447 A1	4/24/2003	Senak			
	US 2003/0082225 A1	5/1/2003	Mason			
	US 2003/0087099 A1	5/8/2003	Merrill, et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

8/2/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.